

In the Claims:

Claims 1 to 34 (Canceled).

1 35. (New) A turbomachine comprising:

2 a housing that includes at least a frustoconical
3 sloping housing portion;

4 a rotor that includes rotor blades rotatably supported
5 in a space within said sloping housing portion so as to be
6 rotatable about an axis of said turbomachine;

7 a stator ring that includes stator guide vanes
8 arranged in said space within said sloping housing portion
9 axially adjacent to said rotor blades in an axial direction
10 along said axis; and

11 a spoke-centering arrangement that is arranged and
12 adapted to adjustably support said stator ring relative to
13 said housing and to spoke-center said stator ring about
14 said axis;

15 wherein:

16 said spoke-centering arrangement comprises at least
17 three guide pins distributed circumferentially, in a
18 circumferential direction around said axis, about a
19 circumference of said sloping housing portion,

20 each respective one of said guide pins is secured to
21 said sloping housing portion and respectively extends
22 longitudinally at a slant relative to said axial direction
23 and relative to a radial direction extending radially from

24 said axis, through a respective through-hole in said
25 sloping housing portion so that a respective free end of
26 said respective guide pin protrudes inwardly into said
27 space within said sloping housing portion,

28 said spoke-centering arrangement further comprises at
29 least three fork-shaped elements distributed
30 circumferentially in said circumferential direction about
31 a circumference of said stator ring,

32 each respective one of said fork-shaped elements is
33 connected to said stator ring and respectively defines at
34 least a first slot recess between a pair of fork walls of
35 said respective fork-shaped element,

36 said first slot recess of each respective one of said
37 fork-shaped elements is at least partly open in said radial
38 direction and in said axial direction, and is bounded
39 between said pair of said fork walls in said
40 circumferential direction,

41 said free end of each said respective one of said
42 guide pins respectively engages into said first slot recess
43 of a respective associated one of said fork-shaped elements
44 while being constrained in said circumferential direction
45 between said pair of said fork walls of said respective
46 associated fork-shaped element and allowing at least a
47 limited relative motion between said respective guide pin
48 and said respective associated fork-shaped element in said
49 radial direction and in said axial direction in which said
50 first slot recess of said respective associated fork-shaped
51 element is at least partly open.

1 36. (New) The turbomachine according to claim 35, wherein said
2 spoke-centering arrangement comprises exactly seven of said
3 guide pins and correspondingly exactly seven of said
4 fork-shaped elements respectively distributed about said
5 circumference on a radial plane.

1 37. (New) The turbomachine according to claim 35, wherein said
2 free end of each respective one of said guide pins
3 respectively has a triangular shape as seen in said
4 circumferential direction, with an apex of said triangular
5 shape pointing inwardly into said space within said sloping
6 housing portion along a longitudinal axis of said
7 respective guide pin extending at said slant relative to
8 said axial direction and relative to said radial direction,
9 and wherein said triangular shape lies on a plane extending
10 in said axial direction, and wherein said free end of said
11 respective guide pin is elongated on said plane and
12 parallel to said sloping housing portion.

1 38. (New) The turbomachine according to claim 35, wherein said
2 spoke-centering arrangement includes nuts that respectively
3 adjustably secure said guide pins on an outer side of said
4 sloping housing portion.

1 39. (New) The turbomachine according to claim 35, wherein said
2 spoke-centering arrangement further includes a stop

3 arranged on one of said fork-shaped elements so as to bound
4 and limit an axial movability of said one of said
5 fork-shaped elements and said guide vane ring connected
6 thereto, relative to one of said guide pins that engages
7 with said free end thereof into said one of said
8 fork-shaped elements.

1 40. (New) The turbomachine according to claim 35, wherein said
2 stator ring further includes an outer cover band extending
3 in said circumferential direction and connected to radially
4 outer ends of said stator guide vanes, and wherein said
5 fork-shaped elements are connected to said outer cover
6 band.

1 41. (New) The turbomachine according to claim 35, further
2 comprising a seal carrier arranged axially adjacent to a
3 radially outer portion of said stator ring.

1 42. (New) The turbomachine according to claim 41,
2 wherein said stator ring includes an outer cover band
3 that forms said outer portion of said stator ring, and that
4 extends in said circumferential direction, and that is
5 connected to radially outer ends of said stator guide
6 vanes,
7 further comprising a seal body carried on a radially
8 inward side of said seal carrier, and

9 wherein radially outer ends of said rotor blades
10 sealingly cooperate with said seal body.

1 43. (New) The turbomachine according to claim 41, wherein said
2 seal carrier engages with said guide pins and/or said
3 fork-shaped elements so that said seal carrier is
4 spoke-centered about said axis by said spoke-centering
5 arrangement.

1 44. (New) The turbomachine according to claim 41, wherein each
2 said fork-shaped element respectively further defines a
3 second slot recess between another pairing of fork walls of
4 said fork-shaped element, said seal carrier includes a
5 projection protruding from a seal carrier member, and said
6 projection is engaged into said second slot recess.

1 45. (New) The turbomachine according to claim 44, wherein said
2 first slot recess and said second slot recess of said
3 fork-shaped element are positioned circumferentially next
4 to one another with one of said fork walls therebetween in
5 said circumferential direction.

1 46. (New) The turbomachine according to claim 35, wherein said
2 turbomachine is a turbo-engine.

1 47. (New) The turbomachine according to claim 35, wherein said
2 turbomachine is a gas turbine.

1 48. (New) The turbomachine according to claim 35, wherein said
2 guide pins respectively extend longitudinally substantially
3 perpendicularly to said sloping housing portion.

1 49. (New) The turbomachine according to claim 35, wherein said
2 spoke-centering arrangement includes a first set of said
3 guide pins distributed circumferentially about said
4 circumference of said sloping housing portion on a first
5 plane normal to said axis, a second set of said guide pins
6 distributed circumferentially about said circumference of
7 said sloping housing portion on a second plane normal to
8 said axis and spaced axially from said first plane, a first
9 set of said fork-shaped elements distributed
10 circumferentially about said circumference of said stator
11 ring on said first plane so as to engage respectively with
12 said first set of said guide pins, and a second set of said
13 fork-shaped elements distributed circumferentially about
14 said circumference of said stator ring on said second plane
15 so as to engage respectively with said second set of said
16 guide pins.

1 50. (New) A combination of the turbomachine according to
2 claim 49 and a mounting tool adapted to carry out an
3 alignment or adjustment of a selected first one of said
4 guide pins of said first set and a selected second one of
5 said guide pins of said second set, wherein said mounting

6 tool comprises a plate-shaped base body having two recesses
7 therein, wherein said plate-shaped base body is positioned
8 on a radially inner side of said sloping housing portion
9 with said respective free ends of said first and second
10 selected guide pins respectively received in said two
11 recesses of said plate-shaped base body so that said first
12 and second selected guide pins are thereby held in an
13 aligned and adjusted position and constrained against
14 turning, and further comprising two nuts respectively
15 tightened onto said first and second selected guide pins on
16 an outer side of said sloping housing portion.

1 51. (New) The combination according to claim 50, wherein said
2 mounting tool further comprises a handle extending
3 approximately perpendicularly from said plate-shaped base
4 body.

1 52. (New) The combination according to claim 50, wherein said
2 two recesses of said plate-shaped base body are so
3 configured and arranged such that said respective free ends
4 of said first and second selected guide pins extend
5 longitudinally perpendicularly to a plane along which said
6 plate-shaped base body extends, and such that said
7 plate-shaped base body can be disengaged and removed from
8 said free ends of said first and second selected guide pins
9 tangentially to said plane.